

AUTOMATIC DEVICE FOR PRODUCING SAMPLES WITH A VIEW TO  
IMPLEMENTING CHEMICAL OR BIOLOGICAL REACTIONS IN LIQUID  
MEDIUM

**Abstract**

The invention relates to an automatic device (100) for producing a plurality of reaction samples from several constituents for implementing chemical or biological reactions in liquid medium. According to the invention, it comprises: a first supply plate (110), comprising N receptacles containing constituents, a second supply plate (120), comprising M receptacles containing constituents, a sample plate (130), comprising several cavities exhibiting a volume of the order of a few tens of nanoliters, intended to contain a mixture of constituents, a piezoelectric micropipette (141, 142) able to deliver drops of volume of the order of a nanoliter, means for moving the piezoelectric micropipette along at least two perpendicular axes Y, Z so that it can sample from each filled receptacle, a determined amount of a constituent, and means of relative displacement of the piezoelectric micropipette and of the sample plate, which are associated with means of triggering discharge in such a way that said micropipette delivers at least one drop of constituent into each cavity of the sample plate.